

REMARKS

Claims 2 through 19 are pending in this application.

I. OBJECTION TO THE DRAWINGS

On page 1 of the Office Action, the Examiner objected to the drawings under 37 C.F.R. § 1.83(a). The Examiner states that “an elastic spring member must be shown (labeled) or the feature(s) canceled from the claim(s).” In response, a correction is submitted in which an elastic spring member is shown (labeled 82). The Examiner's reference to “83” is in error; the correct reference number is “82”.

Reference is made to the original specification herein, which refers to the spring as follows: At p. 12, lines 14-17, it is said, “The jammed paper removing means is so constructed that a one of cover plates 23 and 23' is formed to be revolved with a hinge shaft 81 in the center and *an elastic member such as a tension coil spring* is provided between cover plate 23 and base member 21.” Although no reference number was expressly stated in the original specification, identifying the italicized phrase with the number 83, it would be clear to a person of ordinary skill that the “element that appears to be a spring coil labeled as ‘83’ [which] was deleted with respect to the reference number” corresponds, from the context, to the italicized phrase. Accordingly, the “element that appears to be a spring coil . . .” is not new matter.

Therefore, the drawings are being amended, and a formal drawing bearing this correction is submitted herewith, in which coil spring 82 is re-inserted in Figures 6, 9 and 10, in order to comply with the requirement of the office action, p. 1.

II. OBJECTION TO THE SPECIFICATION

On page 1 of the Office Action, Detailed Action section, the Examiner objected to the specification under 37 C.F.R. § 1.75(a) because —

on page 4, lines 4-6, “the main body is formed with a first, a second, and a third paper transport paths for discharging the recording paper fed from the optional device” is not supported in any of the figures nor in the later parts of the specification on page 13, lines 14-16, stating “a first paper transport path 93 guides a paper sheet fed from multipurpose feeding unit assembly 20” not optional device 12 or 12' as stated on page 4, lines 4-6; and on page 13, lines 16-17, stating “a second paper transport path 94 guides a paper sheet fed from feeding cassette 15” not optional device 12 or 12' as stated on page 4, lines 4-6.

First, Lim submits that the specification (p. 3, line 9), which states “an electro photo multifunctional peripheral apparatus which has *various paper transport paths*,” lays an adequate foundation for the apparatus having a first, second, and third paper transport paths. This is based on the ordinary dictionary definition of “various,” which is several different ones of the same general kind of thing. Lim respectfully submits, further, that it is sufficient that the specification supports the statement in words without depiction thereof in a figure. The statute (35 U.S.C. § 113) requires a drawing only “where *necessary* for the understanding of the subject matter sought to be patented.” Having various transport paths rather than just one is not something so complex that it can not be understood without a drawing depicting it. Any requirement in excess of that of the statute would be an *ultra vires* requirement, in excess of the PTO's power under 35 U.S.C. § 6. *Merck & Co. v. Kessler*, 80 F.3d 1543, 38 U.S.P.Q.2d 1347 (Fed. Cir. 1996).

Second, the Examiner's poist of an inconsistency between pages 4 and 13 of the

specification is unfounded. Page 4, lines 4-6 describes the “discharging the recording paper.” This statement is in complete conformance with page 13, lines 14-16.

Notwithstanding the foregoing, if the Examining Staff continues to desire an “appropriate correction” per the last line of p. 1 of the Detailed Action, Lim will agree to any reasonable suggestion or proposal of specific language by the Examining Staff in this regard. Lim notes that it is not clear on the present record what specific language the Examining Staff would like to see, and the Examining Staff has not either suggested alternative language or amendment. Clarification of this rejection is respectfully requested pursuant to 37 CFR §1.104(a) and (b), as was requested in Applicant’s Amendment of the 9th of October 2002. Absent compliance by the Examining Staff with 37 CFR §1.104(a) and (b), withdrawal of this objection is respectfully requested.

III. CLAIM REJECTION UNDER 35 U.S.C. § 112

A. Claims 11 and 12 were rejected under the first paragraph of 35 U.S.C. § 112 as containing subject matter which was not described in the specification. The office action states:

As to claim 11, lines 10-25, “said jammed paper removing means comprising: ... a rectangular base member ... paper feeding means, ... a guiding means for guiding a backward and forward movement of the feeding unit assembly” is not supported by the original specification. In the specification page 5, lines 8-10, it states “the jammed paper removing means” is composed so that one of the cover plates is formed to be resolved with a hinge shaft in the center and an elastic member is provided between the cover plate and the base member. There is never any mention of the jammed paper removing means comprising the rectangular base member, paper feeding means, and the guiding means but rather the multiple purpose feeding unit assembly comprises such structures (specification, page 4, line 16 - page 5, line 3; page 10, lines 2-5).

Lim respectfully thanks the examiner for her very careful reading of the claims and thereby giving Lim the opportunity to clarify his language to make the claims correspond to the specification. Lee has therefore amended claim 11 to place the rectangular base member, paper feeding means, and the guiding means in the multiple purpose feeding unit assembly which comprises such structures, per the examiner's comments.

B. On p. 4, claim 10 is rejected under § 112 ¶ 2 because "the cover plate" on line 6 lacks a proper antecedent. Lim thanks the examiner for her careful reading of the claims and for thus giving him the opportunity to improve the clarity of his claim. Lim has therefore amended claim 9, the base claim for claim 10, to recite "at least one cover plate." That provides an antecedent for "the" cover plate in claim 10.

C. In Paper No. 21 the examiner questions the language used by the original specification to explain the various paths of travel by paper or other media, as shown in Figures 3, 4, 11 and 12, and the relation between the third path and the optical device. Although the language of the specification is literally correct, Applicant has amended the specification to remove this question, by adding the phrase "and paper" between the clause "recording paper" and "fed", in order to provide an object for the verb "fed." This basis for the rejection is therefore rendered moot.

D. Claims 2-19 were rejected under the first paragraph of 35 U.S.C. § 112 because "the best mode contemplated by the inventor has not been disclosed." The office action goes on to claim that Lim has "concealed" the best mode, stating:

Evidence of concealment of the best mode is based upon the jammed

paper removing means as described in the specification as only “so constructed that a [sic] one of cover plates 23 and 23’ is formed to be revolved with a hinge shaft 81 in the center and an elastic member such as a tension coil spring is provided between cover plate 23 and base 21” (specification, page 12, lines 14-17). There is no description in the specification nor in the drawings on how [sic] is the jammed paper removed and how [sic] is the elastic spring member related to removing the jammed paper. There isn't even a figure in the drawings showing jammed papers in the feeding unit assembly nor a jammed paper being removed. The applicant's representative argues that there are inherent features of the jammed paper removal means such as in the declaration filed 10/9/02 and the appeal brief filed 5/7/02 on page 6, lines 8-10 in the summary of invention, the statements “when paper is jammed in feeding unit assembly 20, a user pulls assembly 20 in the direction of arrow E of Fig. 6 (Specification 15:4-12), which is resisted by the elastic member (e.g. tension coil spring) which stores mechanical energy when stretched” and on the same page 6, lines 17-19, the statement “guiding members 71 are entered into holes 74 (id.), and the stored mechanical energy of the elastic member is released as this occurs”. Why weren't these features described in the specification? Why is applicant concealing this?

This case has already been through a substantial amount of prosecution, including an appeal that was aborted only because the Examining Staff reopened prosecution rather than file an Examiner's Answer. Now, for the first time, in Paper No. 21, the Examining Staff accuses Lim of “concealing” the best mode. One may well ask why the Examining Staff is now raising this issue for the first time and what is the reason for not having raised it earlier if it is meant seriously? Applicant, pursuant to 37 CFR §1.104(d)(2) respectfully requests an explanation in answer to these questions.

In any case, Lim neither has any intent to conceal the best mode nor has he in fact disclosed any less about practicing the invention than he *contemplates*. He has not disclosed modes that he has not contemplated, but § 112 does not require that. The *sine qua non* of a best

mode rejection is evidence that a better mode exists. It is also essential that the inventor knew about that better mode and that he concealed that better mode. There is no evidence of record about either the existence of a better mode or about any concealment of a better mode, although production of this evidence and the burden of proof rests upon the Examining Staff to establish all of these facts.

First, the examiner has failed to show that a mode exists that is superior to that which the specification discloses. Second, the examiner has failed to show that Lim knew of any superior mode. In *Minco, Inc. v. Combustion Engineering, Inc.*, 95 F.3d 1109, 1115-16, 40 USPQ2d 1001, 1005, 1006 (Fed. Cir. 1996), the Federal Circuit held that [t]he record ***must show*** that the inventor considered an alternative mode superior to the disclosed mode.” It also held that, “[b]efore an inventor can conceal a best mode, the record must first show his appreciation of the superiority of one mode over those modes disclosed in the specification.” Where does this record show that Lim “considered an alternative mode superior to the disclosed mode”? Where does the record show Lim’s “appreciation of the superiority of one mode over those modes disclosed in the specification”? The absence of evidence establishing the existence of these facts in the record before the Examiner, is wholly dispositive of this rejection.

The statements -- “The applicant's representative argues that there are inherent features of the jammed paper removal means such as in the declaration filed 10/9/02 and the appeal brief Why weren't these features described in the specification? Why is applicant concealing this?” -- are mere speculative questions that are unsupported by evidence in the record of even the existence of a superior mode. The Examiner’s belated presentation of these questions is

unreasonable and grossly unfair. When something is inherent, it is unnecessary to state it explicitly because persons of ordinary skill already know it. It is redundant to state explicitly that which is inherent. The examiner fails to cite a single case holding that failure to disclose something that is inherent can constitute concealment of the best mode. Clearly, there is no such case.

Furthermore, the inherent features to which the examiner refers are not part of a mode of practicing the invention which a reader of the specification would need to know in order to practice the invention. Instead, they are descriptions of how the disclosed structures of the device operates when a reader of the specification practices the invention as described in the specification. They may be instructive, but they are not needed to practice the invention. For example, a user can practice the invention without knowing that the spring stores mechanical energy when flexed. The user will cause the spring to do that irrespective of whether the user knows that it is happening. Thus, the pilot who dropped the atomic bomb on Nagasaki did not need to know anything about $E = mc^2$. All he needed to know was that he should drop it. Likewise, one can build a machine in accordance with the instant specification without knowing Hooke's Law or anything about how a spring stores and then relinquishes mechanical energy.

The examiner complains that "[t]here isn't even a figure in the drawings showing jammed papers in the feeding unit assembly nor a jammed paper being removed." The office action relies extensively on the Arai patent. Where is there a figure in Arai's drawings showing jammed papers in the feeding unit assembly or a jammed paper being removed from Arai's device? Where are they in Tominaga? Or Sasaki? This rejection is not only unfounded upon the

evidence of record, but is simply unreasonable.

There is a total lack of objective evidence in the record that Lim concealed or intended to conceal anything. There is nothing but baseless conjecture and speculation of the Examining Staff. That is contrary to the Federal Circuit's constant demand for documented evidence of record. See *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001) ("With respect to core factual findings in a determination of patentability" PTO "must point to concrete evidence in the record" and it "cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense")

IV. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

A. Level of Skill

All of the § 103(a) rejections in this case are based on what allegedly "would have been obvious to one of ordinary skill in the art at the time the invention was made."

As Lim has pointed out repeatedly in response to the many prior obviousness rejections in this case, and in his recent appeal brief, it is settled law in the Federal Circuit that an obviousness rejection must be supported by findings as to the ordinary level of skill in the pertinent art and such findings must be supported in turn by substantial evidence. Neither findings on ordinary level of skill or supporting substantial evidence is present in the administrative record made by the Examining Staff. Lim therefore respectfully refers to his appeal brief on this issue and incorporates herein by reference the appeal brief's discussion of the issue. To this, Lim adds that it is believed, based on the present state of the record, that the ordinary level of skill in the pertinent art is that of an ordinary mechanical artisan such as a

mechanic in an automobile repair shop.

The lack of findings on level of skill, that are supported by substantial evidence of record, applies to every § 103 rejection in this case. Therefore, each such rejection would be reversible on that ground, without more, under governing Federal Circuit law. *In re Dembiczak*, 175 F.3d 994, 1000-01, 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999) (holding that an obviousness rejection must be reversed if it fails to contain “specific findings of fact regarding the level of ordinary skill in the art.”).

**B. Claims 2, 9, and 13 — “Applicant's
Admitted Prior Art,” Arai, Tominaga, Gonidec**

On page 4 of the Office action, Paper No. 21, the Examiner rejected claims 2, 9, and 13 under 35 U.S.C. § 103(a) for alleged unpatentability over “Applicant's Admitted Prior Art (Preamble - Jepson Claim and specification, page 2, lines 17-18)” in view of Arai U.S. Patent No. 6,145,828, Tominaga Japanese Patent Publication No. 10-324435, Gonidec *et al.* U.S. Patent No. 5,913,476 and Yokota *et al.* U.S. Patent No. 4,669,896.

Claim 2 is an independent apparatus claim directed to an electro photo multifunctional peripheral apparatus. Claim 9 is an independent method claim directed to a method of facilitating removal of a paper jam in an electro photo multi functional peripheral apparatus, by using a device comparable to the apparatus of claim 2. Claim 13 is a process claim directed to a process for manufacturing an electro photo multifunction apparatus, where the apparatus is provided with a paper jam removal means comparable to the device of claim 2.

Arai discloses a sheet jam removal device concededly different from Lim's invention.

Tominaga discloses a device to improve safety (to avoid injuring workers' hands, see ¶ 0011) when eliminating jammed documents, replacing parts, and cleaning the inside of a device used for printing financial tickets (see ¶ 0002). Yukota discloses an actuating mechanism for a printing head in a printing press. Gonidec discloses a reverse thruster device for a turbojet engine. The office action maintains that it would have been obvious to select, adapt, and combine features of these devices with a conventional electro photo apparatus in a manner replicating Lim's invention.

The office action states (p. 7):

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Applicant's Admitted Prior Art with that of Arai, Tominaga, Gonidec et al., and Yokota et al. because there is a problem with manufacturing the linkage of Arai due to the fact it requires many components or features such as an engage pin 70, a first slot 71, a second slot 72, a turning pin 65, and a grip portion 63 (note Arai; column 8, line 66 - column 9, line 18). The manufacturing of this linkage can be costly. Thus, using a tension spring 18 of Tominaga would be simple and cost effective since it reduces the number of components and features needed to allow two plates to separate and permit removal of jammed sheets or documents along a paper transport path.

The office action is simply stating that it would be obvious to make Lim's invention because doing so would create the benefits that the invention provides. That is not a satisfactory rationale for combination of references under governing Federal Circuit case-law. Rather, it is an *ex post facto* use of the inventor's invention to give the examiner the benefit of 20-20 hindsight. Saying that an ordinary worker in the field would be motivated to adapt and combine four cited references because doing that would give the benefits of Lim's invention is using the benefits of Lim's invention as the alleged motivation to combine, but how is an ordinary artisan

supposed to recognize that combining these particular references would be a good way to get the above-stated advantages without his first being given *something* in the prior art that teaches, suggests, or motivates the combination? Where is the prior-art “something”? Not in this record.

What the office action did here stands in stark contrast to what the Federal Circuit requires. Thus, in *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002), the court held that “the central question is whether there is reason to combine [the] references,” a question of fact drawing on the *Graham* factors,” citing *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001). The *Lee* court then went on to add (citations omitted):

The factual inquiry whether to combine references must be thorough and searching. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with.

The *Lee* court then addressed the same defect--utter lack of *specificity*--that pervasively characterizes the instant rejection. It said:

The need for specificity pervades this authority. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”)

The court pointed to the unspecific and meager explanation that the PTO gave for combining the references and found that the rejection did not measure up to APA standards. What the Federal Circuit said of the *Lee* rejection applies with equal or greater force to the instant rejection:

With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

Not only does this record lack the explanation and findings that *Lee* and prior decisions such as *In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999), require but the instant record lacks substantial evidence to support such findings even if they had been made. This record is a vast wasteland when it comes to motivation in the prior art to combine the references.

Yet, the command of the Federal Circuit in *Lee* and other precedents is that the decision of the PTO must be supported by substantial evidence that furnishes a basis for the findings. The *Lee* court said that it is "the obligation of the agency to make the necessary findings and to provide an administrative record showing the evidence on which the findings are based, accompanied by the agency's reasoning in reaching its conclusions. See *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001)...." And in *In re Gartside*, 203 F.3d 1305,

1314, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000), the Federal Circuit held that a PTO decision “must be justified within the four corners of the record.” Then, in *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001), the Federal Circuit held: “With respect to core factual findings in a determination of patentability” PTO “must point to concrete evidence in the record” and it “cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense.” See also *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962): “The agency must make findings that support its decision, and those findings must be supported by substantial evidence.”

The office action also states (p. 7):

In addition, a linkage and a resilient member such as a spring are equivalent because Gonidec et al. and Yokota et al. shows they are equivalent structures known in the art. Therefore, because these two connecting members were art-recognized equivalents as shown in Gonidec et al. and Yokota et al. at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a linkage for a coil spring member.

The office action does not explain what it means by the term “art-recognized equivalents,” but since Gonidec comes from the jet engine art and Yokota comes from the printing-press printing-head art, doubtless the examiner means to find that a person of ordinary skill in the electro photo multi functional peripheral apparatus art, seeking to solve a problem in that field such as removing jammed paper, would naturally look to the jet engine art and printing-press printing-head art to get ideas. That is an interesting finding, but where is the substantial evidence of record to support it? Can it even be *imagined*, for example, that an ordinary worker in the electro photo multi functional peripheral apparatus art trying to improve jammed paper removal

would look to the jet engine art for information?

Furthermore, equivalency must exist in the same art or there must be a reason to believe that artisans in both of the two arts recognize the equivalency. Yet, it is settled doctrine under the doctrine of equivalents that what is equivalent in one context is inequivalent in other contexts and *vice versa*. Thus, in *IMS Technology, Inc. v. Haas Automation, Inc.*, 206 F.3d 1422 (Fed. Cir. 2000), the Federal Circuit considered whether a tape cassette drive and floppy disk drive were equivalent, and concluded that the issue had to be remanded for a fact intensive inquiry looking to the factual context of the relevant technology. It ruled:

In light of the similarity of the tests for equivalence under § 112, ¶ 6 and the doctrine of equivalents, the context of the invention should be considered when performing a § 112, ¶ 6 equivalence analysis just as it is in a doctrine of equivalents determination. As a result, two structures that are equivalent in one environment may not be equivalent in another. More particularly, when in a claimed “means” limitation the disclosed physical structure is of little or no importance to the claimed invention, there may be a broader range of equivalent structures than if the physical characteristics of the structure are critical in performing the claimed function in the context of the claimed invention. Thus, a rigid comparison of physical structures in a vacuum may be inappropriate in a particular case. . . .

In some cases, an analysis of insubstantial differences in the context of the invention results in a finding of equivalence under § 112, ¶ 6 even though two structures arguably would not be considered equivalent structures in other contexts, e.g., if performing functions other than the claimed function. In other cases, in which the specific physical features of the structure corresponding to the “means” limitation may have more relevance to the claimed invention, a finding of noninfringement results.

In the present case, the spring is relevant to the claimed invention and is not peripheral. Therefore, the issue of equivalency must be viewed in the relevant physical context, which is not

that of a jet engine. As the Federal Circuit said in *IMS*, "Thus, a rigid comparison of physical structures in a vacuum" is not appropriate. The rigid comparison made here is one made in a vacuum instead of in the context of the pertinent art.

That a spring may be used in place of a linkage in a jet engine part does not mean that this can be done in the electro photo multi functional peripheral apparatus art, or in Lim's device, let alone that an ordinary worker in the latter field would know about the alleged equivalency.

**C. Claims 2, 9, and 13 — "Applicant's
Admitted Prior Art," Arai, Gonidec, Yokota**

On page 9 of the Office action, the Examiner rejected claims 2, 9, and 13 under 35 U.S.C. § 103(a) for alleged unpatentability over "Applicant's Admitted Prior Art" in view of Arai, Gonidec and Yokota.

The office action asserts (p. 11):

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Applicant's Admitted Prior Art with that of Arai, Gonidec et al., and Yokota et al. because the linkage 34 of Arai's sheet jam removal device is equivalent to the instant invention's elastic spring member as disclosed in the "jammed paper removing means" under § 112, 6th par. where they both perform the identical function in substantially the same way to achieve substantially the same result.

This is an assertion that it would be obvious to an ordinary worker in the electro photo multifunctional peripheral apparatus art to modify a conventional electro photo multifunctional peripheral apparatus with selected elements of Arai's device and then to modify Arai's selected elements by substituting for the linkage in Arai the linkrod of Gonidec's jet engine thruster, in

such a way as to duplicate Lim's invention, because the linkrod and Arai's linkage are both equivalent to Lim's coil spring. Why are they equivalent? Because, the office action says, they "perform the identical function in substantially the same way."

The office action does not state what is "**the way**" in which the function of Lim's means is performed. As previously stated in the appeal brief, however, which the Examining Staff did not care to answer with an Examiner's Answer, "**the way**" Lim's device operates is as follows:

When paper is jammed in feeding unit assembly 20, a user pulls assembly 20 in the direction of arrow E of Fig. 6 (Specification 15:4-12), which is resisted by the elastic member (e.g., tension coil spring) which stores mechanical energy when stretched. Grasping groove 22a in front cover 22 assists in the withdrawal operation. Then the user raises cover plate 23 upward. Cover plate 23 is then revolved with hinge shaft 81, which exposes to the outside a portion between feeding rollers 41 and 42 and pinch rollers 51 and 53 (Specification 15:8-12). That makes it easy for the user to remove the jammed paper (*id.*).

Then, the user pushes assembly 20 in the direction of arrow F of Fig. 6, returning the assembly into the apparatus (Specification 15:13-18). Guiding members 71 are entered into holes 74 (*id.*), and the stored mechanical energy of the elastic member is released as this occurs, which guides assembly 20 exactly into place and prevents it from being arbitrarily moved forward incorrectly (Specification 16:1-2).

That is how Lim's device operates. Aside from the conclusory incantation of the tripartite test of *Graver Tank*, the office action contains no statement of how Arai's device and the jet engine device operate, let alone an explanation of how the way that they operate is substantially the same way as the way Lim operates. Clearly, they do not. Arai's linkage is incapable of resisting the movement of assembly 20 in direction E and storing mechanical energy as it does so. The same is true of the jet engine alleged equivalent. Arai's linkage is incapable of releasing the stored mechanical energy to help guide assembly 20 exactly into place and

prevent it from being arbitrarily moved forward incorrectly (Specification 16:1-2). The same is true of the jet engine alleged equivalent. Not only does the office action fail to explain how the jet engine and other alleged equivalents operate in the same way to perform the same function, but it is clear that no such explanation could be provided since it is manifestly not the case.

In *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001), the Federal Circuit commanded, “With respect to core factual findings in a determination of patentability” the PTO “must point to concrete evidence in the record” and it “cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense.” This rejection does not pass muster under *Zurko*.

The statement on p. 12 of the office action, that “Gonidec et al. and Yokota et al. show they are equivalent structures known in the art” fails to recognize that the jet engine art is not the electro photo multifunctional peripheral apparatus art, nor is it the printing press art. “The art” does not reasonably mean disparate arts. What is known in the jet engine art is not presumed to be known in the electro photo multifunctional peripheral apparatus art.

A suggestion is made at p. 14 of the office action that cover plate 23 *per se* or cover plate 23' *per se* can constitute the entire jammed paper removing means. This is based on the statement quoted from the specification at p. 13:2-3 saying “the jammed paper removing means **may be** advantageously provided at the other cover plate 23'.” The suggestion in the office action is based on a misreading of the language quoted and an interpretation inconsistent with the ordinary English language meaning of the words. The passage cited by the Examiner is

clearly talking about where the jammed paper means can be located, not what constitutes the jammed paper means. The Federal Circuit would never sustain such a misinterpretation of ordinary, nontechnical English words. The location at which an element *may be* provided is not **what** the element *may be*.

D. Claims 2, 9, and 13 — Sasaki, Arai, Gonidec, Yokota

On page 14 of the Office action, the Examiner rejected claims 2, 9, and 13 under 35 U.S.C. § 103(a) for alleged unpatentability over Sasaki *et al.* U.S. Patent No. 4,787,616 in view of Arai, Gonidec, and Yokota. The rationale of this rejection is stated in language almost identical to that of the immediately preceding rejection. Accordingly, Lim incorporates herein by reference his remarks and arguments made above under heading C.

E. Claims 2, 9, and 13 — Sasaki, Arai, Tominaga, Gonidec, Yokota

On page 22 of the Office action, the Examiner rejected claims 2, 9, and 13 under 35 U.S.C. § 103(a) for alleged unpatentability over Sasaki in view of Arai, Tominaga, Gonidec, and Yokota. The rationale for combining Tominaga's device for improving safety against hand injuries in a ticket dispenser with the other references is the same as that proffered earlier — one gets the benefits of Lim's invention if one selects appropriate elements from Tominaga's device and combines them with elements of a conventional electro photo multifunctional peripheral apparatus. That is inadequate as a rationale for combination of references since it uses the invention as a basis for the motivation to combine. The rationale for combining the linkrod from the jet engine with the other art is also the same as before — alleged equivalency.

Lim therefore respectfully incorporates herein by reference his prior remarks and

arguments.

F. At p. 28 of the office action, further statements are made about the alleged equivalency of a rigid link and an elastic spring member. It may be that in some contexts where the substantial elasticity of an elastic spring member is immaterial to how the member performs its function in the particular device in question, a rigid link can be substituted for the spring. But that is clearly not the context of this invention, where the substantial elasticity of an elastic spring member is highly relevant to how the member operates in the invention. See Specification 15:4 to 16:2. If rigid members are substituted for the elastic member described in Lim's specification, clearly the resulting apparatus will not operate in the manner described at pp. 15:4 to 16:2. Furthermore, the Examiner's assertion of equivalency is technically inaccurate. Springs are not designed to resist forces of compression; a rigid link can, but is unable to follow resilient tensile extension while a spring can.

A letter to the Office Draftsman accompanies this Response and requests approval of corrections to Figs. 5 and 6. These corrections are shown in red ink. Indication in subsequent Office correspondence of the approval of these corrections is respectfully requested, to enable Applicant to timely arrange for submission of the formal drawings.

No fees are incurred by this Response.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

No fee is incurred by this Amendment.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "R. E. Bushnell", is written over a horizontal line.

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Folio: P56132
Date: 3/24/3
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MARKED-UP VERSION OF AMENDMENTS

IN THE SPECIFICATION

Please enter the following amendments:

1. Please amend the first paragraph on page 2, lines 4 through 11 as follows:

Fig. 1 is a schematic view showing a L-type paper transport path of a conventional electro photo multi functional peripheral apparatus. [it] It is advantageous that the entire length of the L-type paper transport path be short. However, if an optional auxiliary device 2 such as a power stacker is mounted, since the paper transport path is leaned to a left side of a main body 1, optional auxiliary device 2 is overlapped with a feeding unit 3. Therefore, it is difficult or impossible to use the optional device and the feeding unit at the same time. Thus, there is a disadvantage in an expansibility of the optional device.

2. Please amend the paragraph that bridges pages 3 and 4, lines 14 through 6 as follows:

In order to accomplish the above object, the present invention provides an electro photo multi functional peripheral apparatus comprising a main body which is provided with an optional auxiliary device such as a sorter, a power stacker or a large scale paper feeding unit located at one side thereof. A feeding unit for feeding [sheet] sheets of recording paper is mounted at the

other side of the main body. A feeding cassette is mounted at a lower portion of the main body. A multipurpose feeding unit assembly is removably mounted at a center portion of the main body and horizontally transports the recording paper fed from the feeding unit. The main body is formed with a first, a second, and a third paper transport paths for discharging the recording paper and paper fed from the optional device.

3. Please amend the first paragraph on page 5, lines 4 through 7 as follows:

Preferably, the paper feeding means comprises a plurality of feeding [roller] rollers which are mounted at an interval on a rear side of the base member and are rotated by the power transmitting means. A plurality of pinch rollers are rotatably mounted at the cover plates, so as to be respectively opposite to the feeding rollers.

4. Please amend the third paragraph on page 5, lines 11 through 12 as follows:

Preferably, the guiding means comprises guiding rollers which are rotatably mounted [at] on both sides of the base member.

5. Please amend the sixth paragraph on page 7, lines 11 through 12 as follows:

Fig. 10 is a front view showing a state that cover plate is [closed] raised in order to

explain an operation of removing a jammed paper sheet.

6. Please amend the second paragraph on page 8, lines 6 through 9 as follows:

In the conventional electro photo multi functional peripheral apparatus as disclosed above, since it is not easy to use optional device 2, the reliability of the apparatus is lowered. Further, since all of the paper transport [path] paths are formed in main body 1, it is not easy to remove a jammed paper sheet when a paper sheet is jammed.

7. Please amend the paragraph that bridges pages 8 and 9, lines 10 through 1 as follows:

Fig. 3 is a schematic view showing a structure of an electro photo multi functional peripheral apparatus according to the present invention. As shown in Fig. 3, the electro photo multi functional peripheral apparatus according to the present invention is provided with a separate receiving space 11 at a center portion of a main body 10. A separate multipurpose feeding unit assembly 20 for horizontally transporting a paper sheet is removably mounted in receiving space 11. Therefore, when a paper jam [occurred] occurs in multipurpose feeding unit assembly 20, the jammed paper sheet can be easily removed. The electro photo multi functional peripheral apparatus has a simple structure to secure the expansibility of the optional device [and be facile to remove the] easily permits removal of jammed paper [sheet] sheets.

8. Please amend the second paragraph on page 9, lines 5 through 13 as follows:

An optional device 12 is mounted at one side of main body 10. A feeding unit 13 is mounted at the other side of main body 10. [A paper] Paper sheets fed from feeding unit 13 [is] are horizontally transported along multipurpose feeding unit assembly 20 and then discharged along an upper side of main body 10. Further, if necessary, a large scale cassette 14 is mounted at the side of main body 10, so that the paper sheet can be fed to multipurpose feeding unit assembly 20. Alternatively, the paper sheet can be fed from a feeding cassette 15 located at a lower portion of main body 10 and vertically transported and then discharged, whereby the paper transport path can be formed into various types.

9. Please amend the third paragraph on page 9, lines 14 through 17 as follows:

In an embodiment of the electro photo multi functional peripheral apparatus of the present invention, as shown in Fig. 4, a duplex module 12' as one [of the] optional device may be mounted at one side of main body 10. Duplex module 12' uprightly feeds a recording paper from an upper portion of the main body 10.

10. Please amend the paragraph that bridges pages 9 and 10, lines 18 through 10 as follows:

Duplex module 12' may be removably mounted at main body 10 or fixedly mounted at main body 10. In the following embodiment of the present invention duplex module 12' is attached [at] to the main body 10. As shown in Figs. 5 to 10, multipurpose feeding unit assembly 20 comprises a rectangular base member 21. A guiding means is disposed at a portion of base member 21 and guides a backward and forward movement of multipurpose feeding unit assembly 20. A front cover 22 is fixed to a front face of base member 21. At least one cover plate 23 is mounted on an upper face of base member 21. A paper feeding means is mounted at base member 21 and cover plate 23. A power transmitting means transmits power to the paper feeding means. A jammed paper removing means easily removes a jammed paper sheet when [a paper] the sheet [is] has become jammed.

11. Please amend the third paragraph on page 12, lines 14 through 17 as follows:

The jammed paper removing means is so constructed that [a] one of cover plates 23 and 23' is formed to be revolved with a hinge shaft 81 in the center and an elastic member such as a tension coil spring is provided between cover plate 23 and the base member 21.

12. Please amend the paragraph that bridges pages 15 and 16, lines 13 through 2 as follows:

After that, the user [pushed] pushes multipurpose feeding unit assembly 20 in the

direction of arrow F of Fig. 6, so that multipurpose feeding unit assembly 20 is received again in receiving space 11. When the receiving operation of multipurpose feeding unit assembly 20 is completed, position guiding members 71 formed at the rear side of multipurpose feeding unit assembly 20 are entered into position guiding holes 74 formed at the inner portion of main body 10. Therefore, the position of the multipurpose feeding unit assembly 20 is exactly guided and prevented from being arbitrarily moved forward.



PATENT
P56132

IN THE CLAIMS

Please amend claims 9 and 11, as follows:

1 9. A method of facilitating removal of a paper jam in an electro photo multi functional
2 peripheral apparatus comprising:

3 a main body having an optional auxiliary device located at a first side thereof;

4 a feeding unit for feeding sheets of recording paper, located at a second side of the main
5 body;

6 a feeding unit assembly removably mounted at a central portion of the main body, for
7 transporting the sheets of recording paper which the feeding unit feeds,
8 said method comprising the steps of:

9 (1) providing the apparatus with a jammed paper removing means for easily removing
10 a jammed sheet of paper, said jammed paper removing means including at least
11 one cover plate;

12 (2) detecting a paper jam; and

13 (3) operating the jammed paper removing means in a manner such that the paper jam is
14 removed.

1 11. A method of facilitating removal of a paper jam in an electro photo multi functional
2 peripheral apparatus comprising:

3 a main body having an optional auxiliary device located at a first side thereof;

4 a feeding unit for feeding sheets of recording paper, located at a second side of the main
5 body;

6 a feeding unit assembly removably mounted at a central portion of the main body, for
7 transporting the sheets of recording paper which the feeding unit feeds, said
8 feeding unit assembly comprising a rectangular base member and a guiding means
9 for guiding a backward and forward movement of the feeding unit assembly;

10 said method comprising the steps of:

11 (1) providing the feeding unit assembly with a paper feeding means for feeding the sheets
12 of recording paper, said paper feeding means mounted at the base member;

13 (2) mounting a plurality of powered feeding members on a rear side of the base member;

14 (3) mounting [(1) providing the apparatus with a jammed paper removing means for
15 easily removing a jammed sheet of paper, said jammed paper removing means comprising: [a
16 rectangular base member;] at least two cover plates [mounted] on an upper face of the base
17 member;

18 [paper feeding means for feeding the sheets of recording paper, said paper feeding means
19 mounted at the base member and the cover plates, said paper feeding means comprising:]

20 (4) mounting a plurality of powered feeding rollers [mounted] on a rear side of the base
21 member; [and]

22 (5) rotatably mounting a plurality of pinch rollers [rotatably mounted] at the cover plates and
23 [located] opposite the feeding rollers, whereby said cover plates, plurality of powered feeding
24 rollers, and plurality of pinch rollers comprise a jammed paper removing means;

25 [a guiding means for guiding a backward and forward movement of the feeding unit
26 assembly;]
27 (6) [(2)] detecting a paper jam; and
28 (7) [(3)] operating the jammed paper removing means in a manner such that the paper
29 jam is removed.